Supplementary Figure Legends

Supplementary Figure 1. PB does not directly influence interactions of β-catenin with its binding partners. Recombinant fusion proteins GST-TCF4, GST-ECT, and GST-ICAT were incubated with recombinant β-catenin in the presence of increasing concentrations of PB and bound β-catenin was assayed. Mean ±SD (n≥3) are shown.

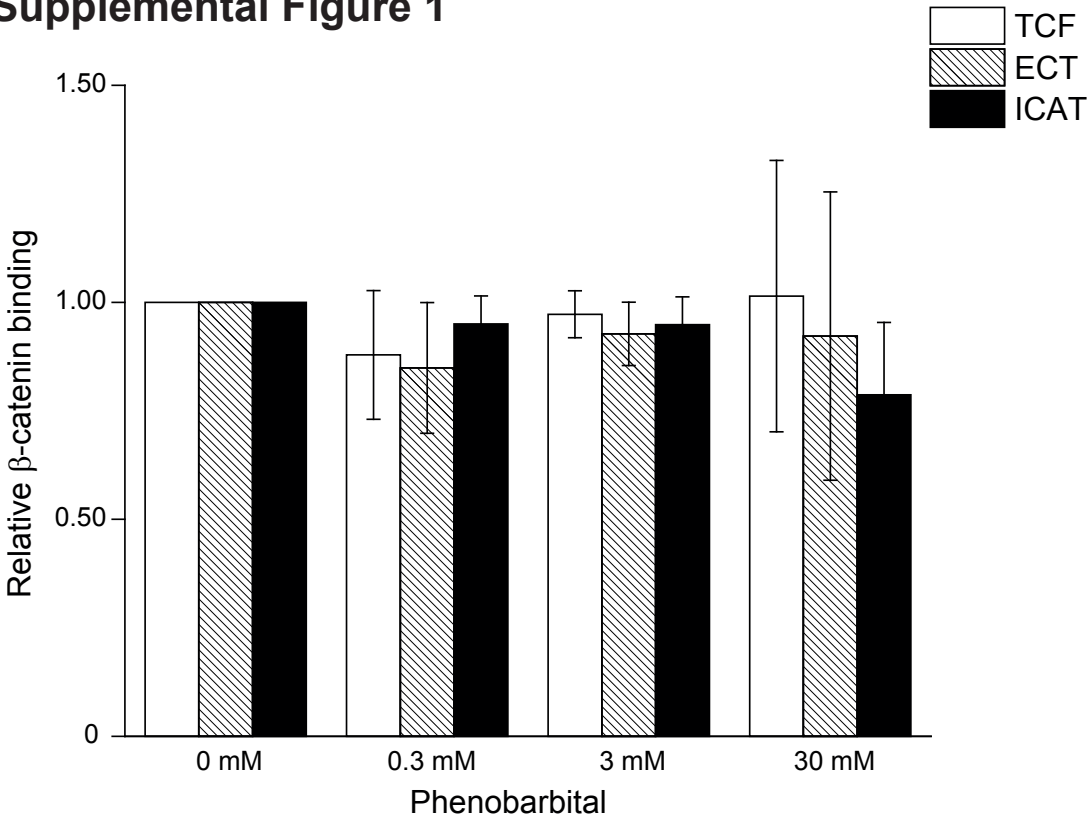
Supplementary Figure 2. Basal and LiCl (15 mM)-induced activities from the 8x β-catenin/TCF-driven Supertopflash (STF) reporter vector are efficiently inhibited in 70.4 cells by incubation with 20 μM iCRT3, a model inhibitor of the pathway, for 24h. Cell treatment with 3 mM PB decreases basal as well as LiCl-induced STF reporter activities ina similar manner. Mean ±SD (n≥3 independent experiments; each experiment performed in triplicates or quadruplicates) are shown. Statistical significance (Student's t-test) is indicated by asterisks: *, $p<0.05$; **, $p<0.01$; ***, $p<0.001$.

Supplementary Figure 3. Regulation of β-catenin signaling by PB is independent of CAR. **(A)** Expression of mRNAs related to CAR-mediated signal transduction was measured in 70.4 cells by real-time RT-PCR in the absence or presence of 3 mM PB, and compared to normal mouse liver (set to 100%). Expression of *Car* mRNA and its model target genes *Cyp2b10* and *Cyp2c* is barely or not detectable. Similarly, the mRNA encoding Cx32, a protein involved in tumorigenicity of CAR activators, is barely detectable. Only the CAR binding partner RXRα is detectable at the mRNA level in meaningful amounts. **(B)** Treatment of 70.4 cells with 10 μM of the CAR activator TCPOBOP (TCP) did not mimic the activity of PB on basal or LiCl (15 mM)-induced activities from the 8x β-catenin/TCF-driven Supertopflash (STF) reporter vector. Mean ±SD (n≥3 independent experiments; reporter assays: each experiment performed in triplicates or quadruplicates) are shown. Statistical significance (Student's t-test) is indicated by asterisks: *, $p<0.05$; **, $p<0.01$; ***, $p<0.001$. Statistical significance was not calculated for mRNA analyses due to the fact that expression of the

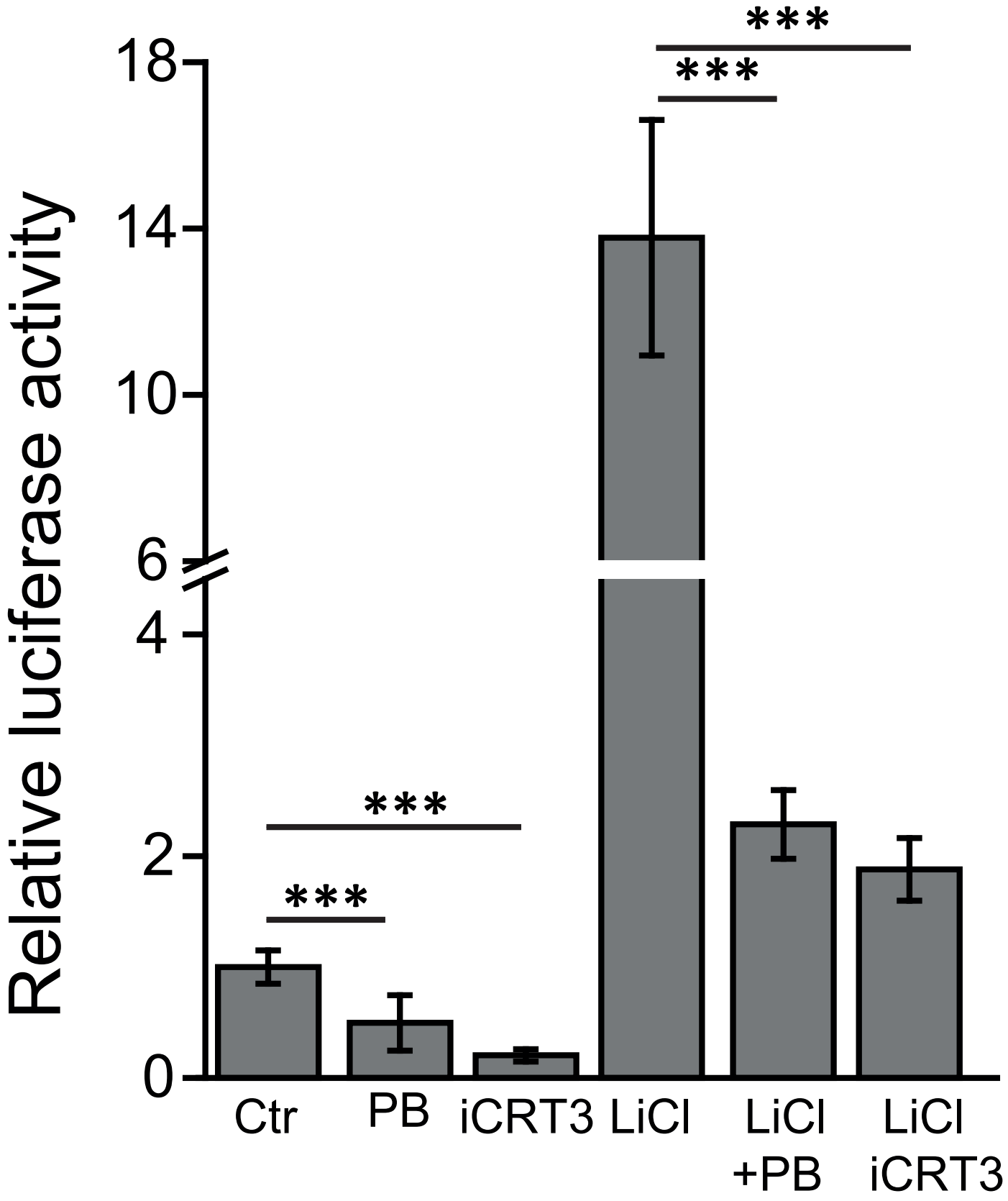
respective genes in 70.4 cells was compared to a single reference sample (mRNA pool from fresh mouse liver).

Supplementary Figure 4. Basal and LiCl (15 mM)-induced activities from the 8x β-catenin/TCF-driven Supertopflash (STF) reporter vector are inhibited by treatment with 3 mM PB for 24h in serum-free medium (left panel). Treatment of cells with 20 μM γ-aminobutyric acid (GABA) did not mimic the PB effect (right panel). Mean ±SD (n≥3 independent experiments; each experiment performed in triplicates or quadruplicates) are shown. Statistical significance (Student's t-test) is indicated by asterisks: *, $p<0.05$; **, $p<0.01$; ***, $p<0.001$.

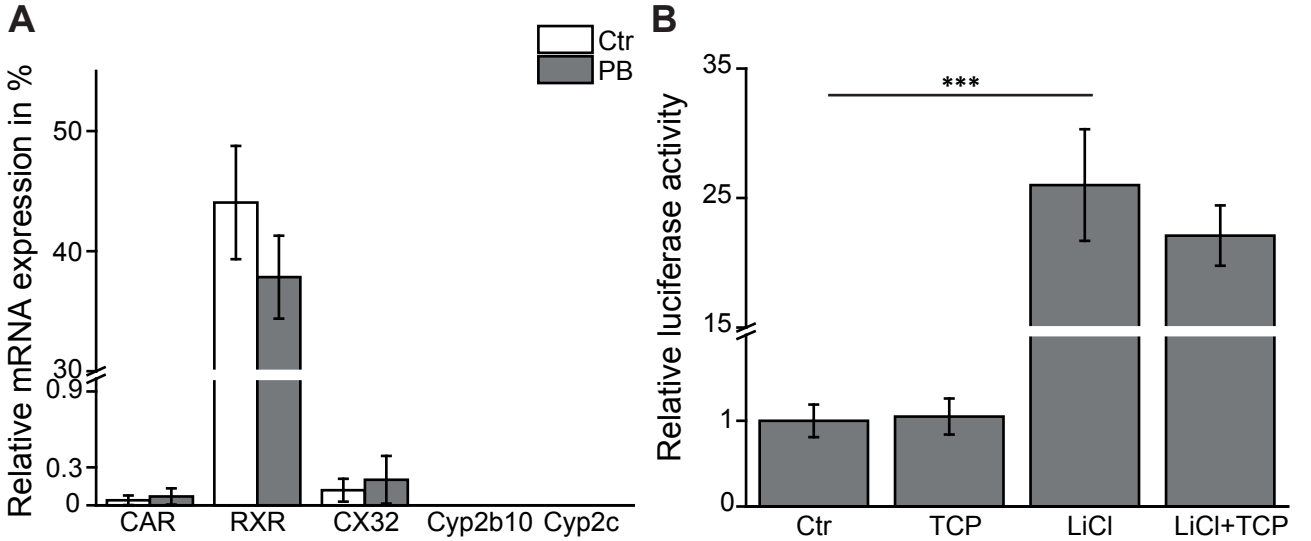
Supplemental Figure 1



Supplemental Figure 2



Supplemental Figure 3



Supplemental Figure 4